

# GRAIN TRANSPORTATION REPORT

Agricultural Marketing Service
United States Department of Agriculture

APRIL 23, 2002

#### Rates for Containerized Grain Continue to Rise in 2002

Despite many years of depressed ocean freight rates for containerized grain products, rates have shown continued increases since 1999, and economic indicators suggest continued increases during 2002.

Rates fell dramatically due to the low volume of exports at the time of the 1997 Asian crisis. Much of the competition between carriers was for lower valued, agricultural commodities, such as animal feed and soybeans, which are typically moved at lower rates than other commodities, such as fruit and meat. As the imbalance between imports from Asia and U.S. exports to Asia increased, so did the imbalance in container supply. Ocean carriers had to ship many containers back to Asia empty, absorbing their repositioning costs in order to meet demand. To avoid moving empty containers to Asia, ocean carriers

dropped rates dramatically, hoping to increase container shipments to this market. As a result, ocean container rates for grain exports fell from 1997 to 1999 by as much as 50 percent. However, as the Asian economies continue to improve, so does the demand for U.S. exports of agricultural products. As of June 2000, many container rates had bounced back to and, in some cases above, the rates reported before the economic crisis. (See Figure 1.)

Though exports to Asia have increased since 1999, the utilization of capacity in the westbound trade to Asia was still only at 51 percent in the first quarter of 2001, as opposed to nearly 58 percent utilization in 1999. (Dekker, N. "Cold Turkey," *Containerization International*, 2001)

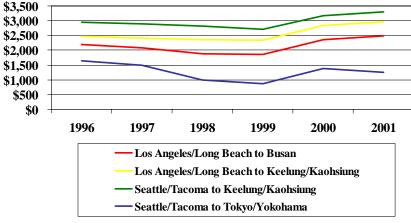


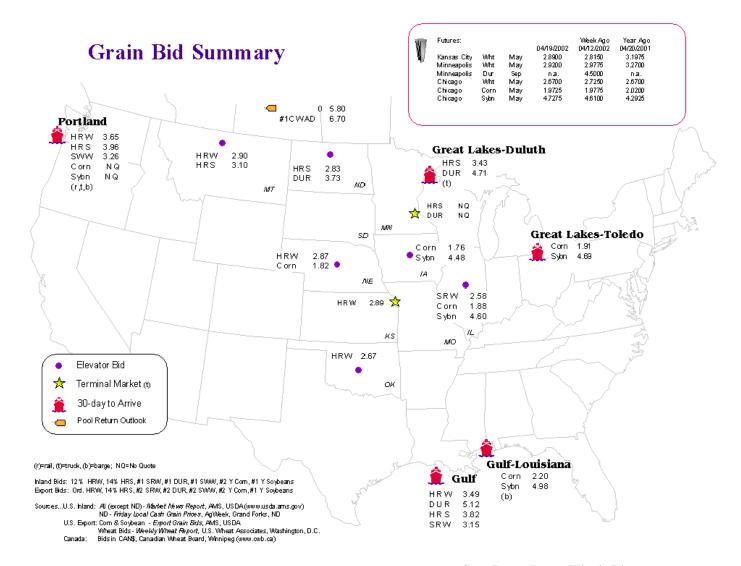
Figure 1. Sample Rates for Containerized Soybeans in Major U.S/Asian Trade Routes (rate is per TEU)

This increased imbalance has been attributed to both the economic slowdown in 2001 and a surplus of capacity due to the introduction of mega-container ships able to carry 6,000 or more twenty-foot equivalent units (TEUS). This imbalance explains the drop in rates for soybeans and animal feed during 2001.

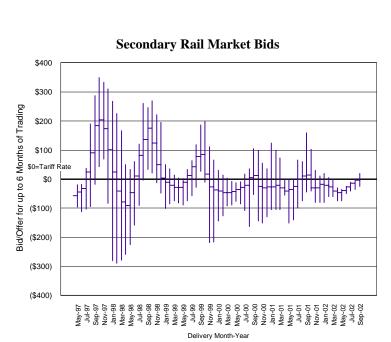
So far in 2002, the economy is showing recovery from last year's slowdown. This will result in an increase of exports from the United States and, most likely, a decrease in the capacity imbalances between the U.S. and Asia. In response to these market factors, rates for U.S. exports to Asia, including soybean and animal feed, are expected to increase. The Container Ocean Freight Rates graphs on page 7, though volatile, depict the overall upward trend since 1999.

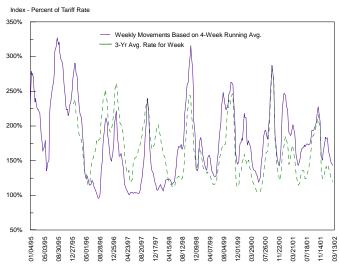
More information about containerized grain exports can be found in a report recently released by the Transportation & Marketing Program (TMP). "U.S. Containerized Grain and Oilseed Exports: An Industry Profile is now available at: http://www.ams.usda.gov/tmd/IPGrainProfile/. The report includes information on the containerized grain industry's intermodal network, shipper population, and container shipment volumes, origins, and rates. In conjunction with an industry data collection to be completed in 2003, TMP's online report will help provide the information needed by the industry to better plan and prepare for the continued growth of the containerized grain market. For more information about this report and about this article, contact Heidi Reichert at heidi.reichert@usda.gov.

Report is prepared by Sigal Nissan, Economist, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Report design by Kimberly Vachal, Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail comments to Sigal.Nissan@usda.gov



#### **Spot Barge Rate - Illinois River**





Rail Car 'Auction' Offerings										
Delivery for:	Jun-02 Jul-02									
	Offered	% Sold	Offered	% Sold						
BNSF-COT	11,820	5%	12,966	3%						
UP-GCAS	5,400	0%	no offer							
Source: Transportation & Marketing /AMS/USDA; www.bnsf.com; www.uprr.com										

Secondary Rail Car Market											
Average Premium/Discount to Tariff, \$/Car - Last Week											
Delivery Period											
	May-02	Jun-02	Jul-02	Aug-02							
BNSF-GF	\$(34)	\$(22)	\$(10)	\$12							
UP-Pool	\$(8)	\$(19)	\$(16)	\$12							
UP-Pool	\$(8)	\$(19)	\$(16)	\$12							

Source: T&M/AMS/USDA. Data from Atwood/ConAgra., Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.; GF=Guaranteed Freight, GEEP=Guaranteed Eqpt. Exchange,

Pool=Guaranteed Pool

note... bids listed are market INDICATORS only & are NOT guaranteed prices, missing value=No Bid Quoted

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction										
Jun-02	Jul-02	Aug-02								
no bid	no bid	no bid								
no bid	no bid	no bid								
no bid	no offer	no offer								
no bid	no offer	no offer								
	o Tariff, \$/Car - La  Jun-02  no bid  no bid  no bid	o Tariff, \$/Car - Last Auction  Jun-02 Jul-02  no bid no bid  no bid no bid  no bid no offer								

Source: T&M/AMS USDA. Data from www.bnsf.com, www.uprr.com, (COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

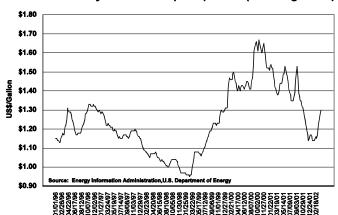
# **Southbound Barge Freight Nominal/Cash Basis Values** Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

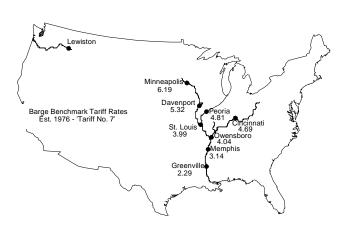
Week		Contract	Rate			
ended	River/Region	Period	Futures	Cash		
04/22/02	St. Louis	Apr	0	100		
		Jun	0	125		
		Aug	0	155		
		Oct	0	205		
		Dec	0	135		
	Illinois River	Apr	0	115		
		Jun	0	138		
		Aug	0	173		
		Oct	0	225		
		Dec	0	163		

Southbound Barge Freight Spot Rates											
	4/17/02	4/10/02	May '02	Jul '02							
Twin Cities	173	167	170	190							
Mid-Mississippi	133	137	136	163							
Illinois River	119	121	127	152							
St. Louis	97	101	106	128							
Lower Ohio	105	106	111	135							
Cairo-Memphis	95	100	101	123							
Source: Transportation & Marketing /AMS/USDA nq=no quote;											

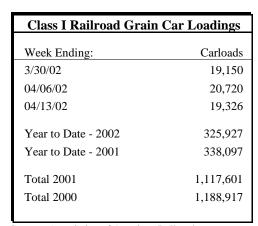
Source: St. Louis Merchants Exchange

#### Weekly Retail Diesel (Road) Prices (Including Taxes)

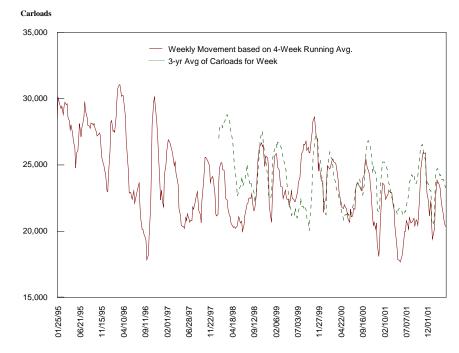




#### **Grain Car Loadings for Class I Railroads**



Source: Association of American Railroads



## Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated									
	E	East		West			anada		
	CSXT	NS	BNSF	KCS	UP	CN	CP		
04/13/02	2600	3,760	6,263	503	6,200	4,208	4,147		
This Week Last Year	2,835	3,247	7,040	355	5,979	4,322	3,793		
2002 YTD	44,462	48,377	117,446	9,441	102,046	59,951	56,101		
2001 YTD	49,472	47,377	133,711	7,292	100,245	71,757	69,052		
2001 Total	151,864	163,018	428,603	26,330	347,156	254,982	232,461		
2000 Total	147,708	153,905	425,849	26,515	364,785	160,749	239,670		

Source: Association of American Railroads

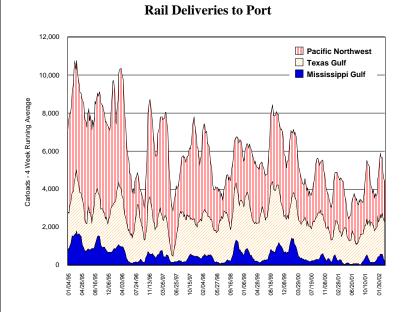
# **Tariff Rail Rates for Unit Train Shipments**

Date	Tariff				Rate	Rate Per	Rate/Per
Effective	Item	Commodity	Origin	Destination	Per Car	MT	Bushel*
04/01/02	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
04/01/02	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
04/01/02	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
04/01/02	43586	Wheat	Kansas City, MO	Portland, OR	\$4,347	\$47.92	\$1.30
04/01/02	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
04/01/02	31040	Corn	Minneapolis, MN	Portland, OR	NA	\$0.00	\$0.00
04/01/02	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
04/01/02	31040	Corn	Omaha, NE	Portland, OR	NA	\$0.00	\$0.00
04/01/02	61180	Soybean	Minneapolis, MN	Portland, OR	NA	\$0.00	\$0.00
04/01/02	61180	Soybean	Omaha, NE	Portland, OR	NA	\$0.00	\$0.00
05/01/98	61180	Soybean	Omaha, NE	Portland, OR	\$2,780	\$25.23	\$0.83

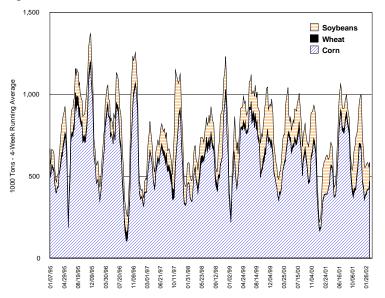
Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

Rail Deliveries to Port Carloads											
	Mississippi Gulf	Texas Gulf	Pacific Northwest	Atlantic & East Gulf							
Week Ending:											
03/06/02	300*	2,200	2,518	380							
03/13/02	264*	1,748	1,864	349							
03/20/02	134*	2,099	1,984	279							
03/27/02	101*	2,341	2,073	236							
04/03/02	2*	1,707	2,040	638							
04/10/02	66*	2,530	1,127	275							
YTD 2002	4,813*	28,672	32,553	8,906							
YTD 2001	4,413	21,190	36,624	11,960							
Total 2001	10,022	81,804	111,376	26,604							
Total 2000	25,767	104,473	128,414	14,816							
Source: Transpo	ortation & Mark	eting/AMS/	/USDA								



# Barge Movements - Locks 27



Barge Grain Movements for week ending 4/13/02											
	Corn	<b>Wht</b> 1,00	Sybn 0 Tons	Total							
Mississippi River											
Rock Island, IL (L15)	260	6	93	367							
Winfield, MO (L25)	513	6	143	664							
Alton, IL (L26)	744	28	191	963							
Granite City, IL (L27)	758	33	188	979							
Illinois River (L8)	186	5	47	240							
Ohio (L52)	48	7	14	100							
Arkansas (L1)	0	43	5	48							
2002 YTD	9,338	627	3,288	13,882							
2001 YTD	7,523	582	3,325	12,152							
Total 2001	31,878	2,679	10,616	47,091							
Total 2000	33,482	2,518	10,327	48,247							

Miss YTD: Calendar year totals include Miss/27, Ohio/52 and Ark/1. Source: U.S. Army Corp of Engineers; L15 & L25 closed for winter.

<sup>(\*)</sup> Incomplete Data

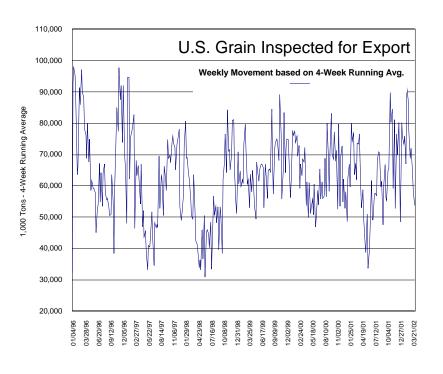
<sup>(\*\*)</sup> Identical figures are correct

U.S. Export Balances (1,000 Metric Tons)

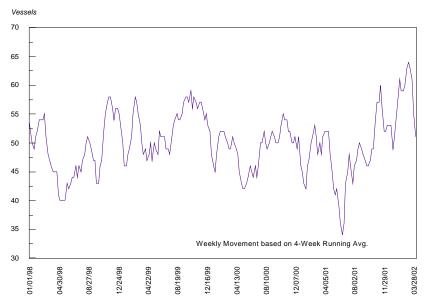
				Wheat			Corn	Soybean	Total
	HRW	SRW	HRS	SWW	DUR	All		•	
Unshipped Exports-Crop Year									
04/11/02	1,206	864	881	487	171	3,609	6,578	3,008	13,195
This Week Year Ago	1,098	404	879	569	274	3,223	5,216	2,090	10,529
Cumulative Exports-Crop Year									
01/02 YTD	7,484	4,749	4,771	2,744	1,029	20,777	27,897	23,550	72,224
00/01 YTD	8,073	4,038	4,927	4,561	954	22,552	28,781	17,713	69,046
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942

 $Source: Foreign\ Agricultural\ Service\ YTD-Year-to-Date\ (www.fas.usda.gov)\ Crop\ Year: Wheat=5/31-6/01,\ Corn\ \&\ Soybeans=9/01-8/31$ 

Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons											
	:	Pacific R	egion_	<u>N</u>	/lississippi	Gulf	]	Texas Gulf			
	Wheat	Corn	Soybean	Wheat	Corn	Soybean	Wheat	Corn	Soybean		
04/18/02	209	119	8	122	874	214	72	5	0		
2002 YTD	2,643	1,623	891	1,717	11,071	7,237	1,924	105	699		
2001 YTD	3,024	1,566	1,152	1,676	9,631	6,728	1,652	164	722		
% of Last Year	27%	27%	52%	25%	31%	40%	28%	22%	69%		
1998 Total	10,838	4,373	651	5,048	31,330	14,917	7,270	562	1,392		
Source: Federal Grain Inspection Service YTD-Year-to-Date											



Select Canadian Ports - Export Inspections 1,000 Metric Tons, Crop Year										
	Wheat	<u>Durum</u>	Barley							
Week Ended: 04/18/02										
Vancouver	4,512	268	390							
Prince Rupert	959	0	0							
Prairie Direct	1,000	311	267							
Thunder Bay	312	191	45							
St. Lawrence	1,969	1,441	0							
2001 YTD Exports	8,752	2,211	702							
2000 YTD Exports	8,756	2,156	1,328							
% of Last Year	100%	103%	53%							
Source: Canadian Grains Commission	on, Crop year 8/	1-7/31								

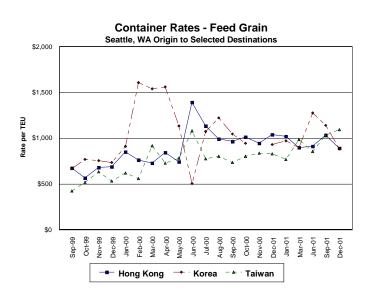


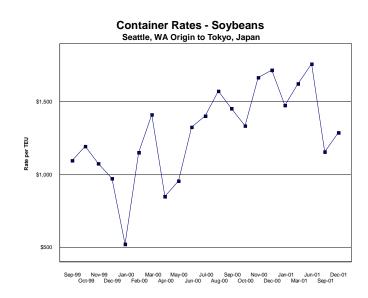
Gulf Region Vessels Loaded - Past 7 Days-

	Gulf		Pacific Northwest		Vancouver, B.C.			
	<u>In Port</u>	Loaded 7-Days	Due Next 10-Days	<u>In Port</u>	Loaded Due Next 7-Days 10-Days	<u>In Port</u>	Loaded <u>7-Days</u>	Due Next
04/11/02	40	52	51	5		2	4	1
04/18/02	29	48	68	8		4	3	1
2001 Range	(1365)	(2864)	(4681)	(118)		(420)	(314)	(07)
2000 Range	(2350)	(3457)	(4783)	(415)		(420)	(519)	(09)
2001 Avg	36	48	63			12	8	3
2000 Avg	36	49	65			11	9	3
1999 Avg	32	52	65			10	9	3

## **Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share

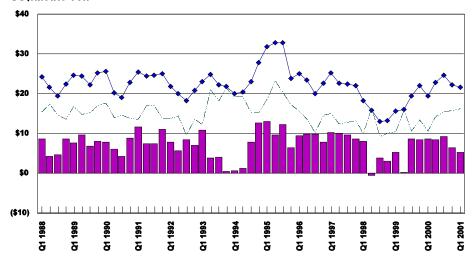




→ Rate - Gulf to Japan
---- Rate - PNW to Japan

Spread - Gulf vs. PNW to Japan

## **US\$/Metric Ton**



Quarterly Ocean Freight Rates

	2002	2001	% Change		2002	2001	% Change
Gulf to	1st Qtr	1st Qtr	Change	Pacific NW to	1st Qtr	1st Qtr	Change
Japan	\$18.10	\$21.70	-16%	Japan	\$11.13	\$16.36	-31%
Mexico	\$31.49		-				
Venezuela		\$13.53	-				
N. Europe	\$10.67	\$15.19	-29%	Argentina to			
N. Africa	\$17.58	\$26.25	-33%	Med. Sea	\$17.85	\$22.14	-19%
Med. Sea	\$10.97	\$14.81	-25%	N. Europe	\$13.48	\$16.47	-18%
Black Sea	\$49.12		-	Japan	\$25.59	\$30.51	-16%

Ocean Freight Rates (Select Locations) - week ending 4/20/02								
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)			
Gulf	UK	Grains	Apr 20/30	38,000	\$15.00			
Gulf	Egypt	Heavy Grain	Apr 15/25	55,000/60,000	\$12.75			
Gulf	Egypt	Wheat	Apr 20/25	55,000	\$14.50			
Gulf	Japan	Heavy Grain	May 1/15	54,000	\$21.50			
Gulf	Japan	Heavy Grain	May 1/15	54,000	\$22.00			
Gulf	Japan	Heavy Grain	May 5/15	54,000	\$21.25			
Gulf	Japan	Heavy Grain	Apr 25/May 5	54,000	\$21.75			
N. Pacific	Taiwan	Heavy Grain	May 8/15	57,000	\$11.20			
Source: Maritime Research	Inc.; rates shown are for long ton	(2,240 lbs.=one long ton), F	O.B., except where otherw	vise indicated; op=option				